

REMARKS

Claims 1, 6, 10, 12 and 21 have been amended. No claims have been added or canceled. Accordingly, claims 1-27 are currently pending in the above-identified application.

35 U.S.C. §103

Claims 1-2, 4, 6-13 and 20-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Nutt et al (U.S. No. 6,449,331) in view of Tomura et al (U.S. No. 6,212,251). Claims 3 and 14-17 stand rejected under 35 U.S.C. §1-3(a) as being unpatentable over Nutt et al as modified by Tomura et al further in view of Boutenko et al (U.S. Patent No. 6,332,014). Finally, claims 5, 18 and 25 stand rejected as being an unpatentable over Nutt et al as modified by Tomura et al and in view of Ohnesorge et al. These rejections are traversed as follows.

The present invention is directed to a plurality of radiation detectors that detect both a first detection signal of X-rays that have passed through a test subject and a second detection signal of γ -rays radiated from the test subject. There is also provided a second X-ray transfer apparatus for moving the X-ray source in a longitudinal direction of the bed between the radiation detectors and the bed.

None of the cited references disclose this feature of the currently pending claims. For example, Nutt et al disclose that an X-ray signal and a γ -rays are detected by a scintillator and that an X-ray detection signal and a γ -rays detection signal are output. However, there is no disclosure regarding the movement of an X-ray transfer apparatus between an X-ray source in a longitudinal direction of a bed between the radiation detectors and the bed. There is also no discussion of the output of the first detection signal of X-rays that have passed through a test subject and a second detection of γ -rays radiated from the test subject.

The deficiencies in Nutt et al are not overcome by resort to any of the remaining references. Tomura et al merely discloses an imaging apparatus provided with an X-ray source and radiation detector is moved on a rail installed on a floor in a longitudinal direction of a bed. However, there is no disclosure concerning an X-ray transfer apparatus for moving an X-ray source in a longitudinal direction of a bed between the radiation detectors and the bed.

Boutenko et al disclose that an X-ray pulse is irradiated. However, Boutenko et al do not disclose any X-ray transfer apparatus for moving an X-ray source in a longitudinal direction of a bed between the X-ray detectors

and the bed. In addition, Boutenko et al do not disclose providing a plurality of radiation detectors that output both a first detection signal of X-rays that have passed through a test subject and a second detection of γ -rays signals radiate from the test subject.

Finally, Ohnesorge et al disclose an X-ray examination system having a collimator. However, Ohnesorge et al do not disclose an X-ray transfer apparatus for moving an X-ray source in a longitudinal direction of a bed between the X-ray radiation detectors and the bed in a radiological imaging apparatus that has a plurality of radiation detectors that output both a first detection signal of X-rays that have passed through a test subject and a second detection of X-rays radiated from the test subject.

Therefore, since none of the cited references disclose the features mentioned above in connection with the present invention, it is submitted that the pending claims patentably define the present invention over the cited art.

Conclusion


In view of the foregoing amendments and remarks, Applicants contend that the above-identified application is

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now in condition for allowance. Accordingly, reconsideration and reexamination are respectfully requested.

Respectfully submitted,



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